IN THE CLAIMS:

Please cancel claims 1-22 without prejudice or disclaimer, and substitute new claims 23-44 therefor as follows:

Claims 1-22 (Cancelled).

23. (New) A method for evaluating traffic dispersion at at least one exchange in a communications network, the exchange being arranged for applying a set of routing rules in selectively allotting to a plurality of links incoming traffic directed toward a given destination, comprising the steps of:

incrementally generating traffic quantums representative of said traffic; and

producing a distribution of said traffic quantums over said links in said plurality according to said set of routing rules, the distribution thus obtained being statistically representative of the dispersion of said incoming traffic over said plurality of links at said exchange.

24. (New) The method of claim 23, comprising the steps of:

measuring the volume of said incoming traffic directed toward said given destination; and

generating said traffic quantums by subdividing said measured traffic volume by a given number of loop steps.

25. (New) The method of claim 23, comprising the steps of:

determining, for each link in said plurality, a number of call attempts and a corresponding number of seizures;

if said number of call attempts equals said number of seizures, setting a load

limit for applying said set of routing rules for said link equal to the number of circuits

available in the link; and

if said number of call attempts is greater than said respective number of seizures,

setting said load limit equal to the outgoing traffic volume measured by the exchange on

said link.

26.   (New) The method of claim 25, comprising the steps of:

accepting said traffic quantums to be assigned to a given link only if the sum of

all the traffic portions assigned to said link is smaller than said load limit set for said link,

otherwise selecting a next choice in said set of routing rules.

27.   (New) The method of claim 25, comprising the steps of:

selecting within said network at least a first exchange receiving traffic from at

least a second and a third exchange; and

obtaining, based on respective distributions of said quantums of traffic generated

at said second and third exchanges, traffic dispersion data indicative of:

the traffic (TV_{mxp}) incoming into said first exchange from said second

exchange; and

the traffic (TV_{nxr}) incoming into said first exchange from said third

exchange.

28.   (New) The method of claim 27, comprising the step of obtaining, based

on respective distributions of said quantums of traffic, distribution data representative of

the traffic toward a given destination generated at said first exchange different from

traffic (TV_{mxp}, TV_{nxr}) incoming from said second and third exchanges.

29.   (New) The method of claim 27, comprising the steps of:

partitioning the traffic outgoing from said first exchange based on the respective

routing rules into:

a first group, including traffic components coming from said second exchange

using a given subset of links in said set of routing rules; and

a second group, including traffic components coming from said third exchange

using the whole set of links in said set of routing rules.

30.   (New) The method of claim 29, comprising the steps of:

analysing the traffic volume (TV_{kxy}) directed toward a given destination within

said network and carried by a respective link coming out of said first exchange; and

determining a first component of said traffic volume (TV_{kxy}) coming from said

second exchange as

$$TV_{kxy,m} = \frac{TV_{mxp} \times TV_{kxy}}{\overset{\forall CG \in \Delta}{\underset{\delta}{\sum} TV_{kx\delta}}}$$

wherein Δ is the subset of links used by a current routing rule in said first

exchange.

31.   (New) The method of claim 30, comprising the steps of:

analysing the traffic volume (TV_{kxy}) directed toward a given destination within

said network and carried by a respective link coming out of said first exchange; and

determining a first component of said traffic volume (TV_{kxy}) coming from said third

exchange as

$$TV_{kxy,n} = \frac{TV_{nxr} \times (TV_{kxy} - TV_{kxy,A})}{\overset{\forall CG \in \Phi}{\underset{\delta}{\sum} (TV_{kx\delta} - TV_{kx\delta,A})}}$$

wherein $TV_{ky,A} = \sum_{\alpha}^{\forall \alpha \in A} TV_{ky,\alpha}$ is the sum of all the results obtained for said second exchange for all the links used by said routing rule and Φ is the whole set of links used by a current routing rule in said first exchange.

32.　(New) The method of claim 23, wherein said steps of incrementally generating traffic quantums representative of said traffic and producing a distribution of said traffic quantums are performed in the absence of interference with operation of said communications network.

33.　(New) A system for evaluating traffic dispersion at at least one exchange in a communications network, the exchange being arranged for applying a set of routing rules in selectively allotting to a plurality of links incoming traffic directed toward a given destination, comprising an evaluation module configured for:

incrementally generating traffic quantums representative of said traffic; and

producing a distribution of said traffic quantums over said links in said plurality according to said set of routing rules, the distribution thus obtained being statistically representative of the dispersion of said incoming traffic over said plurality of links at said exchange.

34.　(New) The system of claim 33, comprising a measuring module for measuring the volume of said incoming traffic directed toward said given destination, said evaluation module being configured for generating said traffic quantums by subdividing the traffic volume measured by said measuring module by a given number of loop steps.

35.   (New) The system of claim 33, comprising:

a measuring module configured for determining, for each link in said plurality, a number of call attempts and a corresponding number of seizures; and

a routing rules generating module for setting a load limit for applying said set of routing rules, said routing rules generating module being configured for:

if said number of call attempts equals said number of seizures, setting a load limit for applying said set of routing rules for said link equal to the number of circuits available in the link, and

if said number of call attempts is greater than said respective number of seizures, setting said load limit equal to the outgoing traffic volume measured by said measuring module on said link.

36.   (New) The system of claim 33, comprising a routing rules generating module configured for:

accepting said traffic quantums to be assigned to a given link only if the sum of all the traffic portions assigned to said link is smaller than said load limit set for said link, otherwise selecting a next choice in said set of routing rules.

37.   (New) The system of claim 33, for use in a network comprising at least a first exchange receiving traffic from at least a second and a third exchange, comprising at least one said evaluation module configured for:

obtaining, based on respective distributions of said quantums of traffic generated at said second and third exchanges, traffic dispersion data indicative of:

the traffic (TV_{mxp}) incoming into said first exchange from said second exchange; and

the traffic (TV_{nxr}) incoming into said first exchange from said third exchange.

38.   (New) The system of claim 37, wherein said at least one evaluation module is configured for obtaining, based on respective distributions of said quantums of traffic, distribution data representative of the traffic toward a given destination generated at said first exchange different from traffic (TV_{mxp}, TV_{nxr}) incoming from said second and third exchanges.

39.   (New) The system of claim 37, wherein said evaluation module is configured for:

partitioning the traffic outgoing from said first exchange based on the respective routing rules into:

a first group, including traffic components coming from said second exchange using a given subset of links in said set of routing rules; and

a second group, including traffic components coming from said third exchange using the whole set of links in said set of routing rules.

40.   (New) The system of claim 39, wherein said at least one valuation module is configured for:

analysing the traffic volume (TV_{kxy}) directed toward a given destination within said network and carried by a respective link coming out of said first exchange; and

determining a first component of said traffic volume (TV_{kxy}) coming from said second exchange as

$$TV_{kxy,m} = \frac{TV_{mxp} \times TV_{kxy}}{\underset{\delta}{\overset{\forall CG \in \Delta}{\sum}} TV_{kx\delta}}$$

wherein Δ is the subset of links used by a current routing rule in said first exchange.

41. (New) The system of claim 40, wherein said evaluation module is configured for:

analysing the traffic volume (TV_{kxy}) directed toward a given destination within said network and carried by a respective link coming out of said first exchange; and

determining a first component of said traffic volume (TV_{kxy}) coming from said third exchange as

$$TV_{kxy,n} = \frac{TV_{nxr} \times (TV_{kxy} - TV_{kxy,A})}{\sum_{\delta}^{\forall CG \in \Phi} (TV_{kx\delta} - TV_{kx\delta,A})}$$

wherein $TV_{kxy,A} = \sum_{\alpha}^{\forall \alpha \in A} TV_{kxy,\alpha}$ is the sum of all the results obtained for said second exchange for all the links used by said routing rule and Φ is the whole set of links used by a current routing rule in said first exchange.

42. (New) The system of claim 33, wherein said evaluation module is configured for performing steps of incrementally generating traffic quantums representative of said traffic and producing a distribution of said traffic quantums in the absence of interference with operation of said communications network.

43. (New) A communication network including a plurality of exchanges, comprising a system according to any one of claims 33-42.

44. (New) A computer program product capable of being loaded in the memory of at least one computer and including software code portions for performing

the method of any one of claims 23-32 when the product is capable of being run on a

computer.